



**President's Message and
Annual Shareholder Report**

July 31, 2011

Share Class	Ticker
A	QALGX
B	QBLGX
C	QCLGX
IS	QILGX

Federated MDT Large Cap Growth Fund

Fund Established 2005

A Portfolio of Federated MDT Series

Not FDIC Insured • May Lose Value • No Bank Guarantee



**J. Christopher
Donahue**

President

Federated MDT Large
Cap Growth Fund

President's Message

Dear Valued Shareholder,

Enclosed is the Annual Report for Federated MDT Large Cap Growth Fund covering the period from August 1, 2010 through July 31, 2011, as well as an update on the general market conditions prevailing during this period. In this report, you will find performance information, Management's Discussion of Fund Performance, financial statements and a complete listing of the fund's holdings.

The 12-month reporting period began as prospects for a broadening U.S. recovery slowed considerably, prompting the Federal Reserve to commit to a second round of stimulus through additional purchases of Treasury securities. By the end of 2010 and into early 2011, the U.S. economy appeared to be picking up again, but rising agricultural commodity prices, severe winter storms, the tragedy in Japan and a spike in oil and gas prices combined to slow the expansion. Fed Chairman Bernanke and many private economists said they believe these factors will prove transitory and that the pace of growth will pick up in coming months. As the reporting period ended, a contentious compromise deal was signed into law that raised the debt ceiling and cut the budget deficit, although numerous issues remain unresolved. And the U.S. economy struggled to find its footing as other growth-inhibiting headwinds—including a weaker U.S. dollar, high unemployment, and a still-struggling housing industry—remained in place. Finally, a significant event occurred on August 5, after the reporting period, as Standard & Poor's downgraded the long-term creditworthiness of the United States, a move that took some investors by surprise.

THE BENEFITS OF EXPERIENCE

In any investment environment, maintaining perspective and discipline is important. In Federated's 55 years as an investment manager, we have navigated through numerous market cycles that have presented both challenges and opportunities.

Federated's Diverse Fund Lineup

36 Equity Funds from growth and value to international and balanced to alternative strategies

51 Fixed Income Funds including government, corporate and municipal

47 Money Market Funds including agency, Treasury, government and prime funds

OUR COMMITMENT TO YOU

One of the most important reasons for Federated's steadfast presence in this dynamic business is the trust and support of valued shareholders like you. Our desire to continue earning that confidence is the reason behind the principles that form the foundation of our business:

- **Stability**—Federated has been delivering competitive and consistent results to mutual fund investors since 1955 and today ranks as a leading global investment manager.
- **Investment Solutions**—As an experienced money manager, we understand the importance of diversification and allocation in managing overall portfolio risk. Our broad product lineup spans domestic and international equity, fixed income, alternative and money market strategies with the goal of consistent, competitive performance.
- **Diligence**—We take the long view, believing that doing business the right way over time will present opportunity for future growth.

Our recently enhanced website, FederatedInvestors.com, offers easy access to Federated resources that include timely fund updates, economic and market insights from our investment strategists, and financial planning tools. We invite you to register to take full advantage of its capabilities.

As always, we thank you for investing with Federated.

Sincerely,



J. Christopher Donahue
President
September 15, 2011

Investors should carefully consider a Federated Fund's investment objectives, risks, charges and expenses before investing. To obtain a prospectus or, if available, a summary prospectus containing this and other information, visit FederatedInvestors.com. Please carefully read the prospectus before investing.

Federated Securities Corp., Distributor

Share Class	Ticker
A	QALGX
B	QBLGX
C	QCLGX
IS	QILGX

Federated MDT Large Cap Growth Fund

Fund Established 2005

A Portfolio of Federated MDT Series

Financial Highlights
Shareholder Expense Example
Management's Discussion of Fund Performance
Portfolio of Investments Summary Table
Portfolio of Investments
Statement of Assets and Liabilities
Statement of Operations
Statement of Changes in Net Assets
Notes to Financial Statements
Report of Independent Registered Public Accounting Firm
Board of Trustees and Trust Officers
Evaluation and Approval of Advisory Contract
Voting Proxies on Fund Portfolio Securities
Quarterly Portfolio Schedule

Financial Highlights – Class A Shares

(For a Share Outstanding Throughout Each Period)

Year Ended July 31	2011	2010	2009	2008	2007¹
Net Asset Value, Beginning of Period	\$8.45	\$7.60	\$10.23	\$12.12	\$10.17
Income From Investment Operations:					
Net investment income (loss)	(0.03) ²	(0.01) ²	0.00 ^{2,3}	(0.06) ²	(0.14) ²
Net realized and unrealized gain (loss) on investments	2.08	0.86	(2.63)	(0.48)	2.20
TOTAL FROM INVESTMENT OPERATIONS	2.05	0.85	(2.63)	(0.54)	2.06
Less Distributions:					
Distributions from net realized gain on investments	—	—	—	(1.35)	(0.11)
Net Asset Value, End of Period	\$10.50	\$8.45	\$7.60	\$10.23	\$12.12
Total Return⁴	24.26%	11.18%	(25.71)%	(5.76)%	20.38%
Ratios to Average Net Assets:					
Net expenses	1.50%	1.50%	1.50%	1.50%	1.50%
Net investment income (loss)	(0.28)%	(0.08)%	0.04%	(0.49)%	(1.14)%
Expense waiver/reimbursement ⁵	0.74%	0.55%	0.52%	0.14%	2.30%
Supplemental Data:					
Net assets, end of period (000 omitted)	\$44,762	\$45,993	\$68,963	\$102,600	\$88,826
Portfolio turnover	208%	217%	380%	320%	630%

- MDT Large Cap Growth Fund (the "Predecessor Fund") was reorganized into Federated MDT Large Cap Growth Fund (the "Fund") as of the close of business on December 8, 2006. Prior to the reorganization, the Fund had no investment operations. The Fund is the Successor to the Predecessor Fund. The performance information and financial information presented incorporates the operations of the Predecessor Fund, which, as a result of the reorganization, are the Fund's operations.*
- Per share numbers have been calculated using the average shares method.*
- Represents less than \$0.01.*
- Based on net asset value, which does not reflect the sales charge, redemption fee or contingent deferred sales charge, if applicable.*
- This expense decrease is reflected in both the net expense and the net investment income (loss) ratios shown above.*

See Notes which are an integral part of the Financial Statements

Financial Highlights – Class B Shares

(For a Share Outstanding Throughout Each Period)

	Year Ended July 31,				Period Ended 7/31/2007 ¹
	2011	2010	2009	2008	
Net Asset Value, Beginning of Period	\$8.30	\$7.53	\$10.21	\$12.18	\$11.48
Income From Investment Operations:					
Net investment income (loss)	(0.10) ²	(0.07) ²	(0.05) ²	(0.14) ²	(0.08) ²
Net realized and unrealized gain (loss) on investments	2.04	0.84	(2.63)	(0.48)	0.78
TOTAL FROM INVESTMENT OPERATIONS	1.94	0.77	(2.68)	(0.62)	0.70
Less Distributions:					
Distributions from net realized gain on investments	—	—	—	(1.35)	—
Net Asset Value, End of Period	\$10.24	\$8.30	\$7.53	\$10.21	\$12.18
Total Return³	23.37%	10.23%	(26.25)%	(6.43)%	6.10%
Ratios to Average Net Assets:					
Net expenses	2.25%	2.25%	2.25%	2.25%	2.24% ⁴
Net investment income (loss)	(1.04)%	(0.86)%	(0.72)%	(1.22)%	(1.95)% ⁴
Expense waiver/reimbursement ⁵	0.74%	0.56%	0.52%	0.14%	0.54% ⁴
Supplemental Data:					
Net assets, end of period (000 omitted)	\$6,680	\$7,506	\$8,532	\$22,138	\$46,933
Portfolio turnover	208%	217%	380%	320%	630% ⁶

- 1 Reflects operations for the period from March 29, 2007 (date of initial investment) to July 31, 2007.
- 2 Per share numbers have been calculated using the average shares method.
- 3 Based on net asset value, which does not reflect the sales charge, redemption fee or contingent deferred sales charge, if applicable. Total returns for periods of less than one year are not annualized.
- 4 Computed on an annualized basis.
- 5 This expense decrease is reflected in both the net expense and the net investment income (loss) ratios shown above.
- 6 Portfolio turnover is calculated at the Fund level. Percentage indicated was calculated for the year ended July 31, 2007.

See Notes which are an integral part of the Financial Statements

Financial Highlights – Class C Shares

(For a Share Outstanding Throughout Each Period)

Year Ended July 31	2011	2010	2009	2008	2007¹
Net Asset Value, Beginning of Period	\$8.12	\$7.37	\$9.99	\$11.94	\$10.10
Income From Investment Operations:					
Net investment income (loss)	(0.10) ²	(0.07) ²	(0.05) ²	(0.13) ²	(0.22) ²
Net realized and unrealized gain (loss) on investments	2.00	0.82	(2.57)	(0.47)	2.17
TOTAL FROM INVESTMENT OPERATIONS	1.90	0.75	(2.62)	(0.60)	1.95
Less Distributions:					
Distributions from net realized gain on investments	—	—	—	(1.35)	(0.11)
Net Asset Value, End of Period	\$10.02	\$8.12	\$7.37	\$9.99	\$11.94
Total Return³	23.40%	10.18%	(26.23)%	(6.39)%	19.42%
Ratios to Average Net Assets:					
Net expenses	2.25%	2.25%	2.25%	2.22%	2.25%
Net investment income (loss)	(1.05)%	(0.86)%	(0.71)%	(1.21)%	(1.83)%
Expense waiver/reimbursement ⁴	0.74%	0.56%	0.52%	0.14%	5.64%
Supplemental Data:					
Net assets, end of period (000 omitted)	\$7,564	\$6,816	\$7,333	\$14,895	\$14,388
Portfolio turnover	208%	217%	380%	320%	630%

- The Predecessor Fund was reorganized into the Fund as of the close of business on December 8, 2006. Prior to the reorganization, the Fund had no investment operations. The Fund is the Successor to the Predecessor Fund. The performance information and financial information presented incorporates the operations of the Predecessor Fund, which, as a result of the reorganization, are the Fund's operations.*
- Per share numbers have been calculated using the average shares method.*
- Based on net asset value, which does not reflect the sales charge, redemption fee or contingent deferred sales charge, if applicable.*
- This expense decrease is reflected in both the net expense and the net investment income (loss) ratios shown above.*

See Notes which are an integral part of the Financial Statements

Financial Highlights – Institutional Shares

(For a Share Outstanding Throughout Each Period)

Year Ended July 31	2011	2010	2009	2008	2007¹
Net Asset Value, Beginning of Period	\$8.57	\$7.70	\$10.33	\$12.20	\$10.20
Income From Investment Operations:					
Net investment income (loss)	(0.00) ^{2,3}	0.01 ²	0.02 ²	(0.03) ²	(0.03) ²
Net realized and unrealized gain (loss) on investments	2.11	0.86	(2.65)	(0.49)	2.14
TOTAL FROM INVESTMENT OPERATIONS	2.11	0.87	(2.63)	(0.52)	2.11
Less Distributions:					
Distributions from net realized gain on investments	—	—	—	(1.35)	(0.11)
Net Asset Value, End of Period	\$10.68	\$8.57	\$7.70	\$10.33	\$12.20
Total Return⁴	24.62%	11.30%	(25.46)%	(5.55)%	20.81%
Ratios to Average Net Assets:					
Net expenses	1.25%	1.25%	1.25%	1.25%	1.25%
Net investment income (loss)	(0.05)%	0.14%	0.28%	(0.28)%	(0.29)%
Expense waiver/reimbursement ⁵	0.74%	0.56%	0.52%	0.14%	19.41%
Supplemental Data:					
Net assets, end of period (000 omitted)	\$4,565	\$4,179	\$4,769	\$6,280	\$1,798
Portfolio turnover	208%	217%	380%	320%	630%

- The Predecessor Fund was reorganized into The Fund as of the close of business on December 8, 2006. Prior to the reorganization, the Fund had no investment operations. The Fund is the Successor to the Predecessor Fund. The performance information and financial information presented incorporates the operations of the Predecessor Fund, which, as a result of the reorganization, are the Fund's operations.*
- Per share numbers have been calculated using the average shares method.*
- Represents less than \$0.01.*
- Based on net asset value.*
- This expense decrease is reflected in both the net expense and the net investment income (loss) ratios shown above.*

See Notes which are an integral part of the Financial Statements

Shareholder Expense Example (unaudited)

As a shareholder of the Fund, you incur two types of costs: (1) transaction costs, including sales charges (loads) on purchase or redemption payments; and (2) ongoing costs, including management fees and to the extent applicable, distribution (12b-1) fees and/or shareholder services fees and other Fund expenses. This Example is intended to help you to understand your ongoing costs (in dollars) of investing in the Fund and to compare these costs with the ongoing costs of investing in other mutual funds. It is based on an investment of \$1,000 invested at the beginning of the period and held for the entire period from February 1, 2011 to July 31, 2011.

ACTUAL EXPENSES

The first section of the table below provides information about actual account values and actual expenses. You may use the information in this section, together with the amount you invested, to *estimate* the expenses that you incurred over the period. Simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number in the first section under the heading entitled “Expenses Paid During Period” to estimate the expenses attributable to your investment during this period.

HYPOTHETICAL EXAMPLE FOR COMPARISON PURPOSES

The second section of the table below provides information about hypothetical account values and hypothetical expenses based on the Fund’s actual expense ratio and an *assumed* rate of return of 5% per year before expenses, which is not the Fund’s actual return. Thus, you should *not* use the hypothetical account values and expenses to estimate the actual ending account balance or your expenses for the period. Rather, these figures are required to be provided to enable you to compare the ongoing costs of investing in the Fund with other funds. To do so, compare this 5% hypothetical example with the 5% hypothetical examples that appear in the shareholder reports of the other funds.

Please note that the expenses shown in the table are meant to highlight your ongoing costs only and do not reflect any transaction costs, such as sales charges (loads) on purchase or redemption payments. Therefore, the second section of the table is useful in comparing ongoing costs only, and will not help you determine the relative *total* costs of owning different funds. In addition, if these transaction costs were included, your costs would have been higher.

	Beginning Account Value 2/1/2011	Ending Account Value 7/31/2011	Expenses Paid During Period ¹
Actual:			
Class A Shares	\$1,000	\$1,060.60	\$7.66
Class B Shares	\$1,000	\$1,056.80	\$11.47
Class C Shares	\$1,000	\$1,057.00	\$11.53
Institutional Shares	\$1,000	\$1,062.70	\$6.39
Hypothetical (assuming a 5% return before expenses):			
Class A Shares	\$1,000	\$1,017.36	\$7.50
Class B Shares	\$1,000	\$1,013.64	\$11.23
Class C Shares	\$1,000	\$1,013.59	\$11.28
Institutional Shares	\$1,000	\$1,018.60	\$6.26

¹ Expenses are equal to the Fund's annualized net expense ratios, multiplied by the average account value over the period, multiplied by 181/365 (to reflect the one-half-year period). The annualized net expense ratios are as follows:

Class A Shares	1.50%
Class B Shares	2.25%
Class C Shares	2.26%
Institutional Shares	1.25%

Management's Discussion of Fund Performance (unaudited)

During the 12-month reporting period ended July 31, 2011, the Fund's total return based on net asset value was 24.26% for Class A Shares, 23.37% for Class B Shares, 23.40% for Class C Shares and 24.62% for the Institutional Shares. The total return of the Russell 1000[®] Growth Index,¹ a broad-based securities market index (the "Russell 1000[®] Growth"), was 24.76% for the same reporting period. The Fund's total return for the fiscal year reflected actual cash flows, transaction costs and other expenses which were not reflected in the total return of the Russell 1000[®] Growth.

- 1 The Russell 1000[®] Growth measures the performance of those Russell 1000[®] companies with higher price-to-book ratios and higher forecasted growth values. The index is unmanaged, and unlike the Fund, is not affected by cash flows. The Russell 1000[®] Growth is not adjusted to reflect sales charges, expenses or other fees that the Securities and Exchange Commission (SEC) requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*

Performance data quoted represents past performance which is no guarantee of future results. Investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Mutual fund performance changes over time and current performance may be lower or higher than what is stated. For current to the most recent month-end performance and after-tax returns, visit FederatedInvestors.com or call 1-800-341-7400.

MARKET OVERVIEW

During the 12-month reporting period, domestic equity market performance was strong as evidenced by the 20.94% return of the Russell 3000[®] Index,² which represents the performance of the 3,000 largest U.S. companies by market capitalization. Mid-cap stocks led the way during the reporting period as demonstrated by the 24.51% return of the Russell Midcap[®] Index,³ which exceeded the 19.09% and 23.92% results for the Russell Top 200[®] Index,⁴ representing large-cap stocks and the Russell 2000[®] Index,⁵ representing small-cap stocks, respectively. Growth stocks outperformed value stocks during the fiscal year with the Russell 3000[®] Growth Index⁶ returning 25.12% as compared to 16.90% for the Russell 3000 Value[®] Index.⁷

The best performing sectors in the Russell 1000 Growth during the reporting period were Energy (+42.94%), Consumer Discretionary (+33.54%) and Materials (+29.09%). Underperforming sectors included Telecommunications Services (+11.98%), Utilities (+14.19%) and Financials (+15.51%).

- 2 *The Russell 3000[®] Index offers investors access to the broad U.S. equity universe representing approximately 98% of the U.S. market. The Russell 3000[®] Index is constructed to provide a comprehensive, unbiased and stable barometer of the broad market and is completely reconstituted annually to ensure new and growing equities are reflected. The index is unmanaged and, unlike the Fund, is not affected by cash flows. The index is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*
- 3 *The Russell Midcap[®] Index measures the performance of the 800 smallest companies in the Russell 1000[®] Index and represents approximately 31% of the total market capitalization of the Russell 1000[®] Index. The index is unmanaged and, unlike the Fund, is not affected by cash flows. The index is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*
- 4 *The Russell Top 200[®] Index measures the performance of the 200 largest companies in the Russell 1000[®] Index and represents approximately 68% of the total market capitalization of the Russell 1000[®] Index. The index is unmanaged and, unlike the Fund, is not affected by cash flows. The index is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*
- 5 *The Russell 2000[®] Index measures the performance of the 2,000 smallest companies in the Russell 3000[®] Index and represents approximately 10% of the total market capitalization of the Russell 3000[®] Index. The index is unmanaged and, unlike the Fund, is not affected by cash flows. The index is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*
- 6 *The Russell 3000[®] Growth Index measures the performance of those Russell 3000[®] Index companies with higher price-to-book ratios and higher forecasted growth values. The stocks in this index are also members of either the Russell 1000[®] Growth or the Russell 2000[®] Growth indexes. The index is unmanaged and, unlike the Fund, is not affected by cash flows. The index is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*
- 7 *The Russell 3000[®] Value Index measures the performance of those Russell 3000[®] Index companies with lower price-to-book ratios and lower forecasted growth values. The stocks in this index are also members of either the Russell 1000[®] Value or the Russell 2000[®] Value indexes. The index is unmanaged and, unlike the Fund, is not affected by cash flows. The index is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*

FUND PERFORMANCE

During the 12-month reporting period, the most significant positive factor in the Fund's performance relative to the Russell 1000 Growth was stock selection in the Consumer Staples sector. Stock selection in the Industrials, Consumer Discretionary and Energy sectors also contributed significantly to the Fund's performance. An overweight in the Consumer Discretionary sector, which outperformed the Russell 1000[®] Growth, contributed more moderately. An underweight in the Financials sector, which underperformed the Russell 1000 Growth, also contributed moderately. The most significant negative factor in the Fund's performance was stock selection in the Information Technology sector. An underweight in the Energy sector, which outperformed the Russell 1000 Growth, also detracted significantly. An overweight in the Information Technology sector, which underperformed the Russell 1000 Growth, detracted more moderately from relative performance.

Relative performance can be affected by securities that are held in both the Fund and the Russell 1000 Growth (but with different weightings) as well as securities that are not included in both. Individual stocks detracting from the Fund's performance included Apple,⁸ Exxon,⁸ Schlumberger,⁸ Amazon,⁹ and Edwards Lifesciences.

Individual stocks contributing to the Fund's performance included Netflix, Peline.com, Danaher, Petrohawk Energy and Lorillard.

⁸ *Underweighted in the portfolio as compared to the Russell 1000[®] Growth.*

⁹ *No exposure in the portfolio as compared to the Russell 1000[®] Growth.*

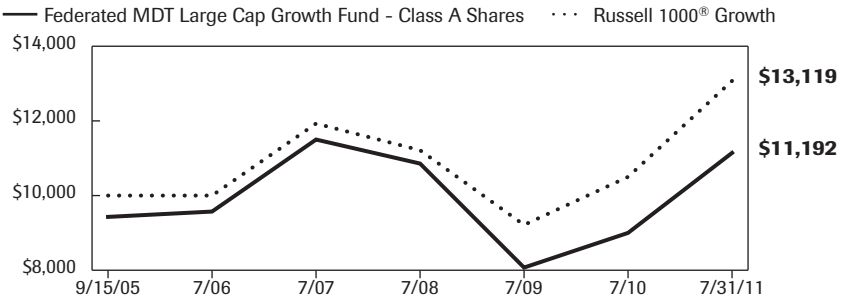
GROWTH OF A \$10,000 INVESTMENT – CLASS A SHARES

The graph below illustrates the hypothetical investment of \$10,000¹ in the Federated MDT Large Cap Growth Fund² (Class A Shares) (the “Fund”) from September 15, 2005 (start of performance) to July 31, 2011, compared to the Russell 1000[®] Growth Index (Russell 1000[®] Growth).³

Average Annual Total Returns for the Period Ended 7/31/2011

1 Year	17.45%
5 Years	1.92%
Start of Performance (9/15/2005)	1.94%

GROWTH OF \$10,000 AS OF JULY 31, 2011



Performance data quoted represents past performance which is no guarantee of future results. Investment return and principal value will fluctuate so that an investor’s Shares, when redeemed, may be worth more or less than their original cost. Mutual fund performance changes over time and current performance may be lower or higher than what is stated. For current to the most recent month-end performance and after-tax returns, visit FederatedInvestors.com or call 1-800-341-7400. Returns shown do not reflect the deduction of taxes that a shareholder would pay on Fund distributions or the redemption of Fund Shares. Mutual funds are not obligations of or guaranteed by any bank and are not federally insured. Total returns shown include the maximum sales charge of 5.50%.

- 1 *Represents a hypothetical investment of \$10,000 in the Fund after deducting the maximum sales charge of 5.50% (\$10,000 investment minus \$550 sales charge = \$9,450). The Fund's performance assumes the reinvestment of all dividends and distributions. The Russell 1000[®] Growth and the Lipper Large-Cap Growth Funds Index have been adjusted to reflect reinvestment of dividends on securities in the indexes.*
- 2 *The Fund is the successor to the MDT Large Cap Growth Fund pursuant to a reorganization that took place on December 8, 2006. Prior to that date, the Fund had no investment operations. Accordingly, the performance information shown for the periods prior to that date is that of the MDT Large Cap Growth Fund.*
- 3 *The Russell 1000[®] Growth measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. The index is unmanaged and, unlike the Fund, is not affected by cash flows. The Russell 1000[®] Growth is not adjusted to reflect sales charges, expenses or other fees that the Securities and Exchange Commission (SEC) requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*

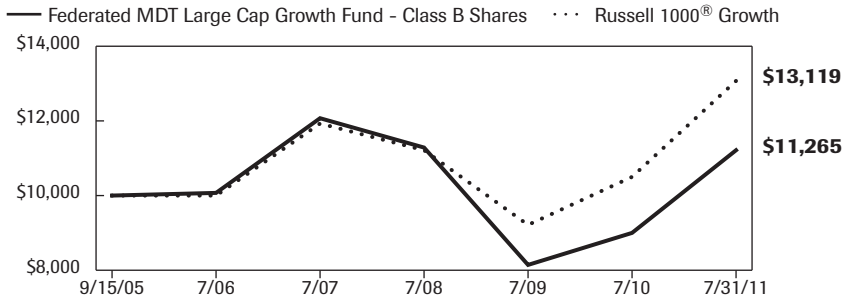
GROWTH OF A \$10,000 INVESTMENT – CLASS B SHARES

The graph below illustrates the hypothetical investment of \$10,000¹ in the Federated MDT Large Cap Growth Fund² (Class B Shares) (the “Fund”) from September 15, 2005 (start of performance) to July 31, 2011, compared to the Russell 1000[®] Growth Index (Russell 1000[®] Growth).³

Average Annual Total Returns for the Period Ended 7/31/2011

1 Year	17.87%
5 Years	1.99%
Start of Performance (9/15/2005) ⁴	2.05%

GROWTH OF \$10,000 AS OF JULY 31, 2011



Performance data quoted represents past performance which is no guarantee of future results. Investment return and principal value will fluctuate so that an investor’s Shares, when redeemed, may be worth more or less than their original cost. Mutual fund performance changes over time and current performance may be lower or higher than what is stated. For current to the most recent month-end performance and after-tax returns, visit FederatedInvestors.com or call 1-800-341-7400. Returns shown do not reflect the deduction of taxes that a shareholder would pay on Fund distributions or the redemption of Fund Shares. Mutual funds are not obligations of or guaranteed by any bank and are not federally insured. Total returns shown include the maximum contingent deferred sales charge (CDSC) of 5.50%, as applicable.

- 1 *Represents a hypothetical investment of \$10,000 in the Fund. The maximum CDSC is 5.50% on any redemption less than one year from the purchase date. The Fund's performance assumes the reinvestment of all dividends and distributions. The Russell 1000[®] Growth and the Lipper Large-Cap Growth Funds Index have been adjusted to reflect reinvestment of dividends on securities in the indexes.*
- 2 *The Fund is the successor to the MDT Large Cap Growth Fund pursuant to a reorganization that took place on December 8, 2006. Prior to that date, the Fund had no investment operations. Accordingly, the performance information shown for the periods prior to that date is that of the MDT Large Cap Growth Fund.*
- 3 *The Russell 1000[®] Growth measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. The Russell 1000[®] Growth is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*
- 4 *The start of performance date was September 15, 2005. Class B Shares of the Fund were offered beginning March 29, 2007. Performance results shown before that date are for the Fund's Institutional Shares and have been adjusted for the maximum CDSC and total annual operating expenses applicable to the Fund's Class B Shares. The Fund's Institutional Shares commenced operations September 15, 2005. Subject to the expense adjustments described above, the Fund's Class B Shares annual returns would have been substantially similar to those of the Fund's Institutional Shares because Shares of each class are invested in the same portfolio of securities.*

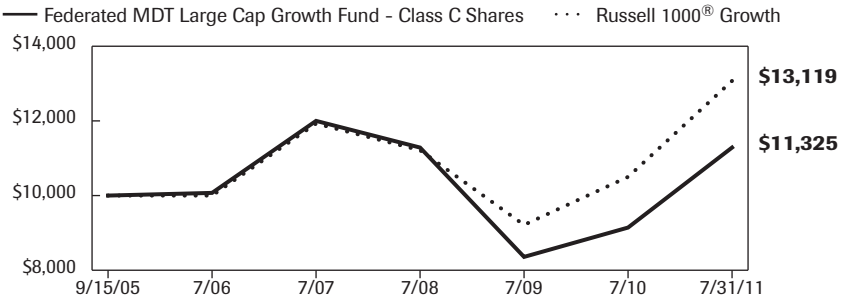
GROWTH OF A \$10,000 INVESTMENT – CLASS C SHARES

The graph below illustrates the hypothetical investment of \$10,000¹ in the Federated MDT Large Cap Growth Fund² (Class C Shares) (the “Fund”) from September 15, 2005 (start of performance) to July 31, 2011, compared to the Russell 1000[®] Growth Index (Russell 1000[®] Growth).³

Average Annual Total Returns for the Period Ended 7/31/2011

1 Year	22.40%
5 Years	2.30%
Start of Performance (9/15/2005)	2.14%

GROWTH OF \$10,000 AS OF JULY 31, 2011



Performance data quoted represents past performance which is no guarantee of future results. Investment return and principal value will fluctuate so that an investor’s Shares, when redeemed, may be worth more or less than their original cost. Mutual fund performance changes over time and current performance may be lower or higher than what is stated. For current to the most recent month-end performance and after-tax returns, visit FederatedInvestors.com or call 1-800-341-7400. Returns shown do not reflect the deduction of taxes that a shareholder would pay on Fund distributions or the redemption of Fund Shares. Mutual funds are not obligations of or guaranteed by any bank and are not federally insured. Total returns shown include the maximum contingent deferred sales charge (CDSC) of 1.00%, as applicable.

- 1 *Represents a hypothetical investment of \$10,000 in the Fund. The maximum CDSC is 1.00% on any redemption less than one year from the purchase date. The Fund's performance assumes the reinvestment of all dividends and distributions. The Russell 1000[®] Growth and the Lipper Large-Cap Growth Funds Index have been adjusted to reflect reinvestment of dividends on securities in the indexes.*
- 2 *The Fund is the successor to the MDT Large Cap Growth Fund pursuant to a reorganization that took place on December 8, 2006. Prior to that date, the Fund had no investment operations. Accordingly, the performance information shown for the periods prior to that date is that of the MDT Large Cap Growth Fund.*
- 3 *The Russell 1000[®] Growth measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. The Russell 1000[®] Growth is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*

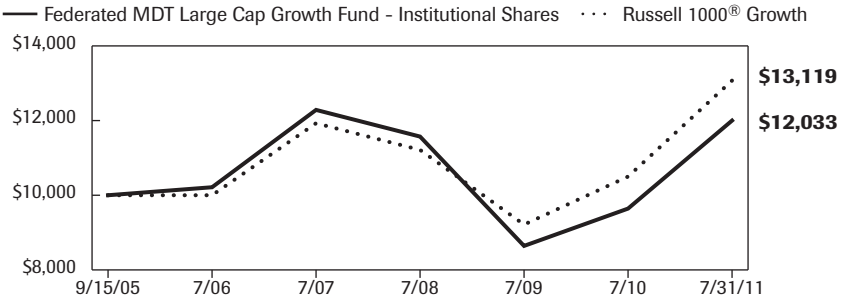
GROWTH OF A \$10,000 INVESTMENT – INSTITUTIONAL SHARES

The graph below illustrates the hypothetical investment of \$10,000¹ in the Federated MDT Large Cap Growth Fund² (Institutional Shares) (the “Fund”) from September 15, 2005 (start of performance) to July 31, 2011, compared to the Russell 1000[®] Growth Index (Russell 1000[®] Growth).³

Average Annual Total Returns for the Period Ended 7/31/2011

1 Year	24.62%
5 Years	3.34%
Start of Performance (9/15/2005)	3.20%

GROWTH OF \$10,000 AS OF JULY 31, 2011



Performance data quoted represents past performance which is no guarantee of future results. Investment return and principal value will fluctuate so that an investor’s shares, when redeemed, may be worth more or less than their original cost. Mutual fund performance changes over time and current performance may be lower or higher than what is stated. For current to the most recent month-end performance and after-tax returns, visit FederatedInvestors.com or call 1-800-341-7400. Returns shown do not reflect the deduction of taxes that a shareholder would pay on Fund distributions or the redemption of Fund shares. Mutual funds are not obligations of or guaranteed by any bank and are not federally insured.

- 1 *The Fund's performance assumes the reinvestment of all dividends and distributions. The Russell 1000[®] Growth and Lipper Large-Cap Growth Funds Index have been adjusted to reflect reinvestment of dividends on securities in the indexes.*
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- 3 *The Russell 1000[®] Growth measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. The Russell 1000[®] Growth is not adjusted to reflect sales charges, expenses or other fees that the SEC requires to be reflected in the Fund's performance. It is not possible to invest directly in an index.*

Portfolio of Investments Summary Table (unaudited)

At July 31, 2011, the Fund's industry composition¹ was follows:

Industry Composition	Percentage of Total Net Assets
Software Packaged/Custom	7.9%
Oil Well Supply	7.7%
Biotechnology	6.1%
Soft Drinks	5.9%
Hotels and Motels	4.9%
Crude Oil & Gas Production	4.7%
Computers—Low End	4.1%
Financial Services	3.6%
Discount Department Stores	3.5%
Medical Technology	3.4%
Commodity Chemicals	3.2%
Cosmetics & Toiletries	3.1%
Internet Services	2.6%
Electronic Test/Measuring Equipment	2.0%
Construction Machinery	1.8%
Diversified Leisure	1.6%
Food Wholesaling	1.6%
Specialty Retailing	1.5%
Stainless Steel Producer	1.5%
Undesignated Consumer Durables	1.5%
Computer Services	1.4%
Oil Service, Explore & Drill	1.4%
Auto Manufacturing	1.3%
Grocery Chain	1.3%
Undesignated Health	1.3%
Cable & Wireless Television	1.1%
Metals & Mining	1.1%
Other Communications Equipment	1.1%
Restaurant	1.1%
Paint & Related Materials	1.0%
Other ²	14.1%
Cash Equivalents ³	1.8%
Other Assets and Liabilities—Net ⁴	(0.2)%
TOTAL	100.0%

- 1 *Except for Cash Equivalents and Other Assets and Liabilities, industry classifications are based upon, and individual portfolio securities are assigned to, the classifications of the Global Industry Classification Standard (GICS) except that the Adviser assigns a classification to securities not classified by the GICS and to securities for which the Adviser does not have access to the classification made by the GICS.*
- 2 *For purposes of this table, industry classifications which constitute less than 1.0% of the Fund's total net assets have been aggregated under the designation "Other."*
- 3 *Cash Equivalents include any investments in money market mutual funds and/or overnight repurchase agreements.*
- 4 *Assets, other than investments in securities, less liabilities. See Statement of Assets and Liabilities.*

Portfolio of Investments

July 31, 2011

Shares		Value
	COMMON STOCKS—98.4%	
	Agricultural Chemicals—0.7%	
9,074	Scotts Miracle-Gro Co.	\$ 457,874
	Apparel—0.3%	
2,555	¹ Under Armour, Inc., Class A	187,563
	Auto Manufacturing—1.3%	
50,096	¹ Ford Motor Co.	611,672
4,859	¹ TRW Automotive Holdings Corp.	245,234
	TOTAL	856,906
	Biotechnology—6.1%	
15,573	¹ Alexion Pharmaceuticals, Inc.	884,546
15,899	¹ BioMarin Pharmaceutical, Inc.	496,526
19,033	¹ Celgene Corp.	1,128,657
21,798	¹ Illumina, Inc.	1,361,285
	TOTAL	3,871,014
	Broadcasting—0.5%	
6,464	¹ DIRECTV Group, Inc., Class A	327,595
	Cable & Wireless Television—1.1%	
18,018	¹ Discovery Communications, Inc.	717,116
	Cable TV—0.7%	
17,114	CBS Corp. (New), Class B	468,410
	Commodity Chemicals—3.2%	
11,200	Kronos Worldwide, Inc.	346,752
18,374	PPG Industries, Inc.	1,547,091
6,401	RPM International, Inc.	134,933
	TOTAL	2,028,776
	Computer Peripherals—0.4%	
5,573	¹ NetApp, Inc.	264,829
	Computer Services—1.4%	
9,163	¹ Cognizant Technology Solutions Corp.	640,219
8,724	¹ Riverbed Technology, Inc.	249,768
	TOTAL	889,987
	Computers - Low End—4.1%	
4,878	¹ Apple, Inc.	1,904,761
43,269	¹ Dell, Inc.	702,689
	TOTAL	2,607,450

Shares		Value
	COMMON STOCKS—continued	
	Construction Machinery—1.8%	
11,805	Caterpillar, Inc.	\$1,166,216
	Cosmetics & Toiletries—3.1%	
3,216	Avon Products, Inc.	84,355
11,703	Estee Lauder Cos., Inc., Class A	1,227,762
9,928	¹ Ulta Salon Cosmetics & Fragrance, Inc.	625,762
	TOTAL	1,937,879
	Crude Oil & Gas Production—4.7%	
14,478	Cabot Oil & Gas Corp., Class A	1,072,530
22,210	EXCO Resources, Inc.	353,361
10,577	Range Resources Corp.	689,198
11,832	SM Energy Co.	891,541
	TOTAL	3,006,630
	Discount Department Stores—3.5%	
42,757	Wal-Mart Stores, Inc.	2,253,721
	Diversified Leisure—1.6%	
5,875	¹ Bally Technologies, Inc.	231,651
17,055	¹ Las Vegas Sands Corp.	804,655
	TOTAL	1,036,306
	Electrical Equipment—0.6%	
7,801	¹ WESCO International, Inc.	395,433
	Electronic Instruments—0.6%	
10,403	¹ Trimble Navigation Ltd.	370,139
	Electronic Test/Measuring Equipment—2.0%	
29,414	¹ Agilent Technologies, Inc.	1,240,094
	Ethical Drugs—0.8%	
10,458	Abbott Laboratories	536,705
	Financial Services—3.6%	
5,352	Mastercard, Inc.	1,622,994
7,661	Visa, Inc., Class A	655,322
	TOTAL	2,278,316
	Food Wholesaling—1.6%	
32,605	Sysco Corp.	997,387
	Grocery Chain—1.3%	
32,442	Kroger Co.	806,832
	Home Products—0.2%	
1,992	Tupperware Brands Corp.	124,480
	Hotels and Motels—4.9%	
21,114	¹ MGM Mirage, Inc.	319,033

Shares		Value
	COMMON STOCKS—continued	
	Hotels and Motels—continued	
24,848	Starwood Hotels & Resorts Worldwide, Inc.	\$1,365,646
1	Wyndham Worldwide Corp.	35
9,183	Wynn Resorts Ltd.	1,411,243
	TOTAL	3,095,957
	Industrial Machinery—0.6%	
4,505	Graco, Inc.	197,905
2,400	¹ Polypore International, Inc.	163,200
	TOTAL	361,105
	Internet Services—2.6%	
458	¹ NetFlix, Inc.	121,823
2,806	¹ Priceline.com, Inc.	1,508,646
	TOTAL	1,630,469
	Medical Technology—3.4%	
17,488	¹ Edwards Lifesciences Corp.	1,247,769
976	¹ Intuitive Surgical, Inc.	390,937
13,799	Medtronic, Inc.	497,454
	TOTAL	2,136,160
	Metals & Mining—1.1%	
8,047	Cliffs Natural Resources, Inc.	722,781
	Miscellaneous Communications—0.6%	
129	¹ Equinix, Inc.	13,477
10,685	¹ Gartner Group, Inc., Class A	394,383
	TOTAL	407,860
	Miscellaneous Metals—0.3%	
5,228	Kennametal, Inc.	206,140
	Office Equipment—0.7%	
19,522	Pitney Bowes, Inc.	420,699
	Office Supplies—0.6%	
11,485	Avery Dennison Corp.	362,352
	Oil Service, Explore & Drill—1.4%	
9,774	¹ Concho Resources, Inc.	914,651
	Oil Well Supply—7.7%	
14,763	Baker Hughes, Inc.	1,142,361
4,789	Carbo Ceramics, Inc.	747,419
44,044	Halliburton Co.	2,410,528
6,375	Schlumberger Ltd.	576,109
	TOTAL	4,876,417

Shares		Value
	COMMON STOCKS—continued	
	Other Communications Equipment—1.1%	
18,017	Harris Corp.	\$ 718,338
	Paint & Related Materials—1.0%	
7,994	Sherwin-Williams Co.	616,897
	Printing—0.3%	
11,646	Donnelley (R.R.) & Sons Co.	219,061
	Railroad—0.6%	
5,943	¹ Kansas City Southern Industries, Inc.	352,717
	Restaurant—1.1%	
2,134	¹ Chipotle Mexican Grill, Inc.	692,654
	Semiconductor Manufacturing—0.5%	
5,753	¹ IPG Photonics Corp.	346,273
	Services to Medical Professionals—0.1%	
601	Quest Diagnostics, Inc.	32,460
	Shoes—0.8%	
5,086	¹ Deckers Outdoor Corp.	504,785
	Soft Drinks—5.9%	
33,494	¹ Coca-Cola Enterprises, Inc.	941,516
17,266	Dr. Pepper Snapple Group, Inc.	651,964
33,936	PepsiCo, Inc.	2,173,262
	TOTAL	3,766,742
	Software Packaged/Custom—7.9%	
35,613	CA, Inc.	794,170
8,995	¹ F5 Networks, Inc.	840,853
12,263	¹ Informatica Corp.	627,007
20,698	¹ Red Hat, Inc.	870,972
36,865	¹ Symantec Corp.	702,647
12,024	¹ VMware, Inc., Class A	1,206,488
	TOTAL	5,042,137
	Specialty Machinery—0.7%	
5,252	Gardner Denver, Inc.	447,943
	Specialty Retailing—1.5%	
10,262	Expedia, Inc.	325,203
12,306	Nordstrom, Inc.	617,269
	TOTAL	942,472
	Stainless Steel Producer—1.5%	
16,095	Allegheny Technologies, Inc.	936,568
	Telecommunication Equipment & Services—0.7%	
4,663	¹ Acme Packet, Inc.	274,744

Shares		Value
	COMMON STOCKS—continued	
	Telecommunication Equipment & Services—continued	
3,641	Qualcomm, Inc.	\$ 199,454
	TOTAL	474,198
	Toys & Games—0.8%	
18,008	Mattel, Inc.	480,093
	Truck Manufacturing—0.9%	
11,022	¹ Navistar International Corp.	565,539
	Undesignated Consumer Cyclical—0.6%	
3,076	¹ Apollo Group, Inc., Class A	156,353
2,505	¹ ITT Educational Services, Inc.	214,603
	TOTAL	370,956
	Undesignated Consumer Durables—1.5%	
7,994	Walter Industries, Inc.	979,825
	Undesignated Health—1.3%	
12,144	¹ Cerner Corp.	807,455
	Wireless Telecommunication Services—0.5%	
19,023	¹ MetroPCS Communications, Inc.	309,694
	TOTAL COMMON STOCKS (IDENTIFIED COST \$59,590,693)	62,569,056
	MUTUAL FUND—1.8%	
1,155,856	^{2,3} Federated Prime Value Obligations Fund, Institutional Shares, 0.13% (AT NET ASSET VALUE)	1,155,856
	TOTAL INVESTMENTS—100.2% (IDENTIFIED COST \$60,746,549) ⁴	63,724,912
	OTHER ASSETS AND LIABILITIES - NET—(0.2)% ⁵	(154,308)
	TOTAL NET ASSETS—100%	\$63,570,604

1 Non-income producing security.

2 Affiliated holding.

3 7-Day net yield.

4 The cost of investments for federal tax purposes amounts to \$60,925,546.

5 Assets, other than investments in securities, less liabilities. See Statement of Assets and Liabilities.

Note: The categories of investments are shown as a percentage of total net assets at July 31, 2011.

Various inputs are used in determining the value of the Fund's investments. These inputs are summarized in the three broad levels listed below:

Level 1—quoted prices in active markets for identical securities. Including investment companies with daily net asset values, if applicable.

Level 2—other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.). Also includes securities valued at amortized cost.

Level 3—significant unobservable inputs (including the Fund's own assumptions in determining the fair value of investments).

The inputs or methodology used for valuing securities are not an indication of the risk associated with investing in those securities.

As of July 31, 2011, all investments of the Fund utilized Level 1 inputs in valuing the Fund's assets carried at fair value.

See Notes which are an integral part of the Financial Statements

Statement of Assets and Liabilities

July 31, 2011

Assets:

Total investments in securities, at value including \$1,155,856 of investments in an affiliated holding (Note 5) (identified cost \$60,746,549)	\$ 63,724,912
Income receivable	21,154
Receivable for investments sold	2,900,646
Receivable for shares sold	91,658
TOTAL ASSETS	66,738,370

Liabilities:

Payable for investments purchased	\$2,763,233
Payable for shares redeemed	247,243
Payable for distribution services fee (Note 5)	9,722
Payable for shareholder services fee (Note 5)	26,108
Accrued expenses	121,460
TOTAL LIABILITIES	3,167,766
Net assets for 6,096,584 shares outstanding	\$ 63,570,604

Net Assets Consist of:

Paid-in capital	\$ 83,173,019
Net unrealized appreciation of investments	2,978,363
Accumulated net realized loss on investments	(22,580,778)
TOTAL NET ASSETS	\$ 63,570,604

Statement of Assets and Liabilities – continued

Net Asset Value, Offering Price and Redemption Proceeds Per Share

Class A Shares:

Net asset value per share (\$44,762,266 ÷ 4,262,519 shares outstanding), no par value, unlimited shares authorized	\$10.50
Offering price per share (100/94.50 of \$10.50)	\$11.11
Redemption proceeds per share	\$10.50

Class B Shares:

Net asset value per share (\$6,679,532 ÷ 651,984 shares outstanding), no par value, unlimited shares authorized	\$10.24
Offering price per share	\$10.24
Redemption proceeds per share (94.50/100 of \$10.24)	\$ 9.68

Class C Shares:

Net asset value per share (\$7,563,570 ÷ 754,620 shares outstanding), no par value, unlimited shares authorized	\$10.02
Offering price per share	\$10.02
Redemption proceeds per share (99.00/100 of \$10.02)	\$ 9.92

Institutional Shares:

Net asset value per share (\$4,565,236 ÷ 427,461 shares outstanding), no par value, unlimited shares authorized	\$10.68
Offering price per share	\$10.68
Redemption proceeds per share	\$10.68

See Notes which are an integral part of the Financial Statements

Statement of Operations

Year Ended July 31, 2011

Investment Income:

Dividends (including \$1,966 received from an affiliated holding (Note 5))	\$ 796,887
Interest	809
TOTAL INCOME	797,696

Expenses:

Investment adviser fee (Note 5)	\$ 490,961
Administrative fee (Note 5)	270,000
Custodian fees	12,101
Transfer and dividend disbursing agent fees and expenses	315,589
Directors'/Trustees' fees	2,802
Auditing fees	22,524
Legal fees	6,731
Portfolio accounting fees	79,605
Distribution services fee (Note 5)	112,217
Shareholder services fee (Note 5)	149,556
Account administration fee (Note 2)	909
Share registration costs	55,870
Printing and postage	40,951
Insurance premiums	4,258
Miscellaneous	6,516
TOTAL EXPENSES	1,570,590

Waivers and Reimbursement (Note 5):

Waiver/reimbursement of investment adviser fee	\$(432,605)
Waiver of administrative fee	(54,343)
TOTAL WAIVERS AND REIMBURSEMENT	(486,948)

Net expenses	1,083,642
Net investment income (loss)	(285,946)

Realized and Unrealized Gain (Loss) on Investments:

Net realized gain on investments	14,733,709
Net change in unrealized appreciation of investments	(324,024)
Net realized and unrealized gain on investments	14,409,685
Change in net assets resulting from operations	\$14,123,739

See Notes which are an integral part of the Financial Statements

Statement of Changes in Net Assets

Year Ended July 31	2011	2010
Increase (Decrease) in Net Assets		
Operations:		
Net investment income (loss)	\$ (285,946)	\$ (178,522)
Net realized gain on investments	14,733,709	16,280,057
Net change in unrealized appreciation/depreciation of investments	(324,024)	(6,276,555)
CHANGE IN NET ASSETS RESULTING FROM OPERATIONS	14,123,739	9,824,980
Share Transactions:		
Proceeds from sale of shares	10,132,396	20,131,474
Cost of shares redeemed	(25,179,540)	(55,060,157)
CHANGE IN NET ASSETS RESULTING FROM SHARE TRANSACTIONS	(15,047,144)	(34,928,683)
Change in net assets	(923,405)	(25,103,703)
Net Assets:		
Beginning of period	64,494,009	89,597,712
End of period	\$ 63,570,604	\$ 64,494,009

See Notes which are an integral part of the Financial Statements

Notes to Financial Statements

July 31, 2011

1. ORGANIZATION

Federated MDT Series (the "Trust") is registered under the Investment Company Act of 1940, as amended (the "Act"), as an open-end management investment company. The Trust consists of five portfolios. The financial statements included herein are only those of Federated MDT Large Cap Growth Fund (the "Fund"), a diversified portfolio. The financial statements of the other portfolios are presented separately. The assets of each portfolio are segregated and a shareholder's interest is limited to the portfolio in which shares are held. Each portfolio pays its own expenses. The Fund offers four classes of shares: Class A Shares, Class B Shares, Class C Shares and Institutional Shares. All shares of the Fund have equal rights with respect to voting, except on class-specific matters. The investment objective of the Fund is long-term capital appreciation.

2. SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of significant accounting policies consistently followed by the Fund in the preparation of its financial statements. These policies are in conformity with U.S. generally accepted accounting principles (GAAP).

Investment Valuation

In calculating its net asset value (NAV), the Fund generally values investments as follows:

- Equity securities listed on an exchange or traded through a regulated market system are valued at their last reported sale price or official closing price in their principal exchange or market.
- Shares of other mutual funds are valued based upon their reported NAVs.
- Derivative contracts listed on exchanges are valued at their reported settlement or closing price.
- Over-the-counter (OTC) derivative contracts are fair valued using price evaluations provided by a pricing service approved by the Board of Trustees (the "Trustees").
- Fixed-income securities acquired with remaining maturities greater than 60 days are fair valued using price evaluations provided by a pricing service approved by the Trustees.
- Fixed-income securities acquired with remaining maturities of 60 days or less are valued at their cost (adjusted for the accretion of any discount or amortization of any premium), which approximates market value.
- For securities that are fair valued in accordance with procedures established by and under the general supervision of the Trustees, certain factors may be considered such as: the purchase price of the security, information obtained by contacting the issuer, analysis of the issuer's financial statements or other available documents, fundamental analytical data, the nature and duration of restrictions on disposition, the movement of the market in which the security is normally traded and public trading in similar securities of the issuer or comparable issuers.

If the Fund cannot obtain a price or price evaluation from a pricing service for an investment, the Fund may attempt to value the investment based upon the mean of bid and asked quotations or fair value the investment based on price evaluations, from one or more dealers. If any price, quotation, price evaluation or other pricing source is not readily available when the NAV is calculated, the Fund uses the fair value of the investment determined in accordance with the procedures described below. There can be no assurance that the Fund could purchase or sell an investment at the price used to calculate the Fund's NAV.

Fair Valuation and Significant Events Procedures

The Trustees have authorized the use of pricing services to provide evaluations of the current fair value of certain investments for purposes of calculating the NAV. Factors considered by pricing services in evaluating an investment include the yields or prices of investments of comparable quality, coupon, maturity, call rights and other potential prepayments, terms and type, reported transactions, indications as to values from dealers and general market conditions. Some pricing services provide a single price evaluation reflecting the bid-side of the market for an investment (a “bid” evaluation). Other pricing services offer both bid evaluations and price evaluations indicative of a price between the prices bid and asked for the investment (a “mid” evaluation). The Fund normally uses bid evaluations for U.S. Treasury and Agency securities, mortgage-backed securities and municipal securities. The Fund normally uses mid evaluations for other types of fixed-income securities and OTC derivative contracts. In the event that market quotations and price evaluations are not available for an investment, the fair value of the investment is determined in accordance with procedures adopted by the Trustees.

The Trustees also have adopted procedures requiring an investment to be priced at its fair value whenever the Adviser determines that a significant event affecting the value of the investment has occurred between the time as of which the price of the investment would otherwise be determined and the time as of which the NAV is computed. An event is considered significant if there is both an affirmative expectation that the investment’s value will change in response to the event and a reasonable basis for quantifying the resulting change in value. Examples of significant events that may occur after the close of the principal market on which a security is traded, or after the time of a price evaluation provided by a pricing service or a dealer, include:

- With respect to securities traded in foreign markets, significant trends in U.S. equity markets or in the trading of foreign securities index futures or options contracts;
- With respect to price evaluations of fixed-income securities determined before the close of regular trading on the NYSE, actions by the Federal Reserve Open Market Committee and other significant trends in U.S. fixed-income markets;
- Political or other developments affecting the economy or markets in which an issuer conducts its operations or its securities are traded; and
- Announcements concerning matters such as acquisitions, recapitalizations, litigation developments, a natural disaster affecting the issuer’s operations or regulatory changes or market developments affecting the issuer’s industry.

The Trustees have approved the use of a pricing service to determine the fair value of equity securities traded principally in foreign markets when the Adviser determines that there has been a significant trend in the U.S. equity markets or in index futures trading. For other significant events, the Fund may seek to obtain more current quotations or price evaluations from alternative pricing sources. If a reliable alternative pricing source is not available, the Fund will determine the fair value of the investment using another method approved by the Trustees.

Repurchase Agreements

The Fund may invest in repurchase agreements for short-term liquidity purposes. It is the policy of the Fund to require the other party to a repurchase agreement to transfer to the Fund’s custodian or sub-custodian eligible securities or cash with a market value (after transaction costs) at least equal to the repurchase price to be paid under the repurchase agreement. The eligible securities are transferred to accounts with the custodian or sub-custodian in which the Fund holds a “securities entitlement” and exercises “control” as those

terms are defined in the Uniform Commercial Code. The Fund has established procedures for monitoring the market value of the transferred securities and requiring the transfer of additional eligible securities if necessary to equal at least the repurchase price. These procedures also allow the other party to require securities to be transferred from the account to the extent that their market value exceeds the repurchase price or in exchange for other eligible securities of equivalent market value.

The insolvency of the other party or other failure to repurchase the securities may delay the disposition of the underlying securities or cause the Fund to receive less than the full repurchase price. Under the terms of the repurchase agreement, any amounts received by the Fund in excess of the repurchase price and related transaction costs must be remitted to the other party.

The Fund may enter into repurchase agreements in which eligible securities are transferred into joint trading accounts maintained by the custodian or sub-custodian for investment companies and other clients advised by the Fund's Adviser and its affiliates. The Fund will participate on a pro rata basis with the other investment companies and clients in its share of the securities transferred under such repurchase agreements and in its share of proceeds from any repurchase or other disposition of such securities.

Investment Income, Gains and Losses, Expenses and Distributions

Investment transactions are accounted for on a trade-date basis. Realized gains and losses from investment transactions are recorded on an identified-cost basis. Interest income and expenses are accrued daily. Dividend income and distributions to shareholders are recorded on the ex-dividend date. Foreign dividends are recorded on the ex-dividend date or when the Fund is informed of the ex-dividend date. Distributions of net investment income, if any, are declared and paid annually. Non-cash dividends included in dividend income, if any, are recorded at fair value. Investment income, realized and unrealized gains and losses, and certain fund-level expenses are allocated to each class based on relative average daily net assets, except that Class A Shares, Class B Shares, Class C Shares and Institutional Shares may bear distribution services fees, shareholder services fees and account administration fees unique to those classes. For the year ended July 31, 2011, account administration fees for the Fund were as follows:

	Account Administration Fees Incurred
Class A Shares	\$770
Class C Shares	139
TOTAL	\$909

Dividends are declared separately for each class. No class has preferential dividend rights; differences in per share dividend rates are generally due to differences in separate class expenses.

Premium and Discount Amortization

All premiums and discounts on fixed-income securities are amortized/accreted using the effective interest rate method.

Federal Taxes

It is the Fund's policy to comply with the Subchapter M provision of the Internal Revenue Code (the "Code") and to distribute to shareholders each year substantially all of its income. Accordingly, no provision for federal income tax is necessary. As of and during the year ended July 31, 2011, the Fund did not have a liability for any uncertain tax positions. The Fund recognizes interest and penalties, if any, related to tax liabilities as income tax expense in the Statement of Operations. As of July 31, 2011, tax years 2008 through 2011 remain subject to examination by the Fund's major tax jurisdictions, which include the United States of America and the Commonwealth of Massachusetts.

When-Issued and Delayed Delivery Transactions

The Fund may engage in when-issued or delayed delivery transactions. The Fund records when-issued securities on the trade date and maintains security positions such that sufficient liquid assets will be available to make payment for the securities purchased. Securities purchased on a when-issued or delayed delivery basis are marked to market daily and begin earning interest on the settlement date. Losses may occur on these transactions due to changes in market conditions or the failure of counterparties to perform under the contract.

Other

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts of assets, liabilities, expenses and revenues reported in the financial statements. Actual results could differ from those estimated.

3. SHARES OF BENEFICIAL INTEREST

The following tables summarize share activity:

Year Ended July 31	2011		2010	
	Shares	Amount	Shares	Amount
Class A Shares:				
Shares sold	497,745	\$ 4,919,437	1,729,634	\$ 14,253,526
Shares redeemed	(1,681,082)	(16,079,618)	(5,353,095)	(45,047,810)
NET CHANGE RESULTING FROM CLASS A SHARE TRANSACTIONS	(1,183,337)	\$(11,160,181)	(3,623,461)	\$(30,794,284)

Year Ended July 31	2011		2010	
	Shares	Amount	Shares	Amount
Class B Shares:				
Shares sold	142,838	\$ 1,355,108	238,449	\$ 1,975,151
Shares redeemed	(395,142)	(3,795,078)	(467,487)	(3,852,446)
NET CHANGE RESULTING FROM CLASS B SHARE TRANSACTIONS	(252,304)	\$(2,439,970)	(229,038)	\$(1,877,295)

Year Ended July 31	2011		2010	
	Shares	Amount	Shares	Amount
Class C Shares:				
Shares sold	196,147	\$ 1,868,043	140,643	\$ 1,149,562
Shares redeemed	(280,790)	(2,640,242)	(296,687)	(2,398,094)
NET CHANGE RESULTING FROM CLASS C SHARE TRANSACTIONS	(84,643)	\$ (772,199)	(156,044)	\$(1,248,532)

Year Ended July 31	2011		2010	
	Shares	Amount	Shares	Amount
Institutional Shares:				
Shares sold	195,505	\$ 1,989,808	317,649	\$ 2,753,235
Shares redeemed	(255,680)	(2,664,602)	(449,603)	(3,761,807)
NET CHANGE RESULTING FROM INSTITUTIONAL SHARE TRANSACTIONS	(60,175)	\$ (674,794)	(131,954)	\$(1,008,572)
NET CHANGE RESULTING FROM TOTAL FUND SHARE TRANSACTIONS	(1,580,459)	\$(15,047,144)	(4,140,497)	\$(34,928,683)

4. FEDERAL TAX INFORMATION

The timing and character of income and capital gain distributions are determined in accordance with income tax regulations, which may differ from GAAP. These differences are due to differing treatments for net operating loss.

For the year ended July 31, 2011, permanent differences identified and reclassified among the components of net assets were as follows:

	Increase (Decrease)
Paid-In Capital	Undistributed Net Investment Income (Loss)
\$(285,946)	\$285,946

Net investment income (loss), net realized gains (losses), and net assets were not affected by this reclassification.

As of July 31, 2011, the components of distributable earnings on a tax basis were as follows:

Net unrealized appreciation	\$ 2,799,366
Capital loss carryforwards	\$(22,401,781)

The difference between book-basis and tax-basis net unrealized appreciation/depreciation is attributable to differing treatments for the deferral of losses on wash sales.

At July 31, 2011, the cost of investments for federal tax purposes was \$60,925,546. The net unrealized appreciation of investments for federal tax purposes was \$2,799,366. This consists of net unrealized appreciation from investments for those securities having an excess of value over cost of \$4,614,540 and net unrealized depreciation from investments for those securities having an excess of cost over value of \$1,815,174.

At July 31, 2011, the Fund had a capital loss carryforward of \$22,401,781 which will reduce the Fund's taxable income arising from future net realized gains on investments, if any, to the extent permitted by the Code and thus will reduce the amount of distributions to shareholders which would otherwise be necessary to relieve the Fund of any liability for federal income tax. Pursuant to the Code, such capital loss carryforward will expire as follows:

Expiration Year	Expiration Amount
2017	\$20,801,154
2018	\$ 1,600,627

Under the recently enacted Regulated Investment Company Modernization Act of 2010, the Fund will be permitted to carry forward capital losses incurred in taxable years beginning after December 22, 2010, for an unlimited period. However, any losses incurred during those future years will be required to be utilized prior to the losses incurred in pre-enactment tax years. As a result of this ordering rule, pre-enactment capital loss carryforwards may be more likely to expire unused. Additionally, post-enactment capital losses that are carried forward will retain their character as either short-term or long-term capital losses rather than being considered all short-term as under previous law.

The Fund used capital loss carryforwards of \$14,783,558 to offset taxable capital gains realized during the year ended July 31, 2011.

5. INVESTMENT ADVISER FEE AND OTHER TRANSACTIONS WITH AFFILIATES

Investment Adviser Fee

Federated MDTA LLC is the Fund's investment adviser (the "Adviser"). The advisory agreement between the Fund and the Adviser provides for an annual fee equal to 0.75% of the Fund's average daily net assets. Subject to the terms described in the Expense Limitation note, the Adviser may voluntarily choose to waive any portion of its fee. For the year ended July 31, 2011, the Adviser voluntarily waived \$431,432 of its fee.

Administrative Fee

Federated Administrative Services (FAS), under the Administrative Services Agreement, provides the Fund with administrative personnel and services. The fee paid to FAS is based on the average aggregate daily net assets of certain Federated funds as specified below:

Administrative Fee	Average Aggregate Daily Net Assets of the Federated Funds
0.150%	on the first \$5 billion
0.125%	on the next \$5 billion
0.100%	on the next \$10 billion
0.075%	on assets in excess of \$20 billion

The administrative fee received during any fiscal year shall be at least \$150,000 per portfolio and \$40,000 per each additional class of Shares. Subject to the terms described in the Expense Limitation note, FAS may voluntarily choose to waive any portion of its fee. For the year ended July 31, 2011, FAS waived \$54,343 of its fee. The net fee paid to FAS was 0.329% of average daily net assets of the Fund. The Fund is currently being charged the minimum administrative fee; therefore the fee as a percentage of average daily net assets is greater than the amounts presented in the chart above.

Distribution Services Fee

The Fund has adopted a Distribution Plan (the "Plan") pursuant to Rule 12b-1 under the Act. Under the terms of the Plan, the Fund will compensate Federated Securities Corp. (FSC), the principal distributor, from the daily net assets of the Fund's Class A Shares, Class B Shares and Class C Shares to finance activities intended to result in the sale of these shares. The Plan provides that the Fund may incur distribution expenses at the following percentages of average daily net assets annually, to compensate FSC:

Share Class Name	Percentage of Average Daily Net Assets of Class
Class A Shares	0.05%
Class B Shares	0.75%
Class C Shares	0.75%

Subject to the terms described in the Expense Limitation note, FSC may voluntarily choose to waive any portion of its fee. For the year ended July 31, 2011, distribution services fees for the Fund were as follows:

	Distribution Services Fees Incurred
Class B Shares	\$ 56,592
Class C Shares	55,625
TOTAL	\$112,217

When FSC receives fees, it may pay some or all of them to financial intermediaries whose customers purchase shares. For the year ended July 31, 2011, FSC retained \$7,111 of fees paid by the Fund. For the year ended July 31, 2011, the Fund's Class A Shares did not incur a distribution services fee; however, it may begin to incur this fee upon approval of the Trustees.

Sales Charges

Front-end sales charges and contingent deferred sales charges (CDSC) do not represent expenses of the Fund. They are deducted from the proceeds of sales of Fund shares prior to investment or from redemption proceeds prior to remittance, as applicable. For the year ended July 31, 2011, FSC retained \$2,285 in sales charges from the sale of Class A Shares. FSC also retained \$144 of CDSC relating to redemptions of Class C Shares.

Shareholder Services Fee

The Fund may pay fees (“Service Fees”) up to 0.25% of the average daily net assets of the Fund’s Class A Shares, Class B Shares and Class C Shares to financial intermediaries or to Federated Shareholder Services Company (FSSC) for providing services to shareholders and maintaining shareholder accounts. Financial intermediaries may include a company affiliated with management of Federated Investors, Inc. A financial intermediary affiliated with management of Federated Investors, Inc. received \$3,124 of Service Fees for the year ended July 31, 2011. Subject to the terms described in the Expense Limitation note, FSSC may voluntarily reimburse the Fund for Service Fees. For the year ended July 31, 2011, Service Fees for the Fund were as follows:

	Service Fees Incurred
Class A Shares	\$112,290
Class B Shares	18,864
Class C Shares	18,402
TOTAL	\$149,556

For the year ended July 31, 2010, FSSC received \$3,621 of fees paid by the Fund.

Expense Limitation

The Adviser and its affiliates (which may include FSC, FAS and FSSC) have voluntarily agreed to waive their fees and/or reimburse expenses so that the total annual fund operating expenses (as shown in the financial highlights) paid by the Fund’s Class A Shares, Class B Shares, Class C Shares and Institutional Shares (after the voluntary waivers and reimbursements) will not exceed 1.50%, 2.25%, 2.25% and 1.25% (the “Fee Limit”), respectively, up to but not including the later of (the “Termination Date”): (a) October 1, 2012; or (b) the date of the Fund’s next effective Prospectus. While the Adviser and its affiliates currently do not anticipate terminating or increasing these arrangements prior to the Termination Date, these arrangements may only be terminated or the Fee Limit increased prior to the Termination Date with the agreement of the Trustees.

General

Certain Officers and Trustees of the Fund are Officers and Directors or Trustees of the above companies.

Transactions Involving Affiliated Holdings

Affiliated holdings are mutual funds which are managed by the Adviser or an affiliate of the Adviser. The Adviser has agreed to reimburse the Fund for certain investment adviser fees as a result of transactions in other affiliated mutual funds. For the year ended July 31, 2011, the Adviser reimbursed \$1,173. Transactions involving the affiliated holding during the year ended July 31, 2011, were as follows:

	Federated Prime Value Obligations Fund, Institutional Shares
Balance of Shares Held 7/31/2010	1,104,117
Purchases/Additions	17,663,559
Sales/Reductions	17,611,820
Balance of Shares Held 7/31/2011	1,155,856
Value	\$ 1,155,856
Dividend Income	\$ 1,966

6. INVESTMENT TRANSACTIONS

Purchases and sales of investments, excluding long-term U.S. government securities and short-term obligations, for the year ended July 31, 2011, were as follows:

Purchases	\$133,827,873
Sales	\$149,181,224

7. LINE OF CREDIT

The Fund participates in a \$100,000,000 unsecured, uncommitted revolving line of credit (LOC) agreement with PNC Bank. The LOC was made available for extraordinary or emergency purposes, primarily for financing redemption payments. Borrowings are charged interest at a rate offered to the Fund by PNC Bank at the time of the borrowing. As of July 31, 2011, there were no outstanding loans. During the year ended July 31, 2011, the Fund did not utilize the LOC.

8. INTERFUND LENDING

Pursuant to an Exemptive Order issued by the Securities and Exchange Commission, the Fund, along with other funds advised by subsidiaries of Federated Investors, Inc., may participate in an interfund lending program. This program provides an alternative credit facility allowing the Fund to borrow from other participating affiliated funds. As of July 31, 2011, there were no outstanding loans. During the year ended July 31, 2011, the program was not utilized.

9. RECENT ACCOUNTING PRONOUNCEMENTS

In April 2011, the Financial Accounting Standards Board (FASB) released Accounting Standards Update (ASU) No. 2011-03, "Reconsideration of Effective Control for Repurchase Agreements." This ASU amends FASB Accounting Standards Codification (ASC) Topic 860, "Transfers and Servicing"; specifically the criteria required to determine whether a repurchase agreement and similar agreements should be accounted for as sales of financial assets or

secured borrowings with commitments. This ASU is effective for fiscal years and interim periods beginning after December 15, 2011. At this time, management is evaluating the implications of adopting ASU No. 2011-03 and its impact on the Fund's financial statements and the accompanying notes.

In addition, in May 2011, FASB released ASU No. 2011-04, "Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." This ASU amends FASB ASC Topic 820, "Fair Value Measurement," to establish common requirements for measuring fair value and for disclosing information about fair value measurements in accordance with GAAP. This ASU is effective for fiscal years and interim periods beginning after December 15, 2011. At this time, management is evaluating the implications of adopting ASU No. 2011-04 and its impact on the Fund's financial statements and the accompanying notes.

Report of Independent Registered Public Accounting Firm

TO THE BOARD OF TRUSTEES OF FEDERATED MDT SERIES AND SHAREHOLDERS OF FEDERATED MDT LARGE CAP GROWTH FUND:

We have audited the accompanying statement of assets and liabilities of Federated MDT Large Cap Growth Fund (the “Fund”) (one of the portfolios constituting Federated MDT Series), including the portfolio of investments, as of July 31, 2011, and the related statement of operations for the year then ended, the statement of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the periods indicated therein. These financial statements and financial highlights are the responsibility of the Fund’s management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. We were not engaged to perform an audit of the Fund’s internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and financial highlights, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our procedures included confirmation of securities owned as of July 31, 2011, by correspondence with the custodian and others, or by other appropriate auditing procedures where replies from others were not received. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of Federated MDT Large Cap Growth Fund, a portfolio of Federated MDT Series, at July 31, 2011, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period then ended, and the financial highlights for each of the periods indicated therein, in conformity with U.S. generally accepted accounting principles.

Ernst & Young LLP

Boston, Massachusetts
September 23, 2011

Board of Trustees and Trust Officers

The Board of Trustees is responsible for managing the Trust's business affairs and for exercising all the Trust's powers except those reserved for the shareholders. The following tables give information about each Trustee and the senior officers of the Fund. Where required, the tables separately list Trustees who are "interested persons" of the Fund (i.e., "Interested" Trustees) and those who are not (i.e., "Independent" Trustees). Unless otherwise noted, the address of each person listed is Federated Investors Tower, 1001 Liberty Avenue, Pittsburgh, PA 15222. The address of all Independent Trustees listed is 4000 Ericsson Drive, Warrendale, PA 15086-7561; Attention: Mutual Fund Board. As of December 31, 2010, the Trust comprised five portfolio(s), and the Federated Fund Family consisted of 43 investment companies (comprising 136 portfolios). Unless otherwise noted, each Officer is elected annually. Unless otherwise noted, each Trustee oversees all portfolios in the Federated Fund Family and serves for an indefinite term. The Fund's Statement of Additional Information includes additional information about Trust Trustees and is available, without charge and upon request, by calling 1-800-341-7400.

INTERESTED TRUSTEES BACKGROUND

Name Birth Date Positions Held with Trust Date Service Began	Principal Occupation(s) for Past Five Years, Other Directorships Held and Previous Position(s)
John F. Donahue* Birth Date: July 28, 1924 TRUSTEE Began serving: June 2006	Principal Occupations: Director or Trustee of the Federated Fund Family; Chairman and Director, Federated Investors, Inc.; Chairman of the Federated Fund Family's Executive Committee. Previous Positions: Chairman of the Federated Fund Family; Trustee, Federated Investment Management Company; Chairman and Director, Federated Investment Counseling.
J. Christopher Donahue* Birth Date: April 11, 1949 PRESIDENT AND TRUSTEE Began serving: May 2006	Principal Occupations: Principal Executive Officer and President of the Federated Fund Family; Director or Trustee of some of the Funds in the Federated Fund Family; President, Chief Executive Officer and Director, Federated Investors, Inc.; Chairman and Trustee, Federated Investment Management Company; Trustee, Federated Investment Counseling; Chairman and Director, Federated Global Investment Management Corp.; Chairman, Federated Equity Management Company of Pennsylvania and Passport Research, Ltd. (investment advisory subsidiary of Federated); Trustee, Federated Shareholder Services Company; Director, Federated Services Company. Previous Positions: President, Federated Investment Counseling; President and Chief Executive Officer, Federated Investment Management Company, Federated Global Investment Management Corp. and Passport Research, Ltd.

* Family relationships and reasons for "interested" status: John F. Donahue is the father of J. Christopher Donahue; both are "interested" due to their beneficial ownership of shares of Federated Investors, Inc. and the positions they hold with Federated and its subsidiaries.

INDEPENDENT TRUSTEES BACKGROUND

Name

Birth Date

**Positions Held with Trust
Date Service Began**

**Principal Occupation(s) for Past Five Years,
Other Directorships Held, Previous Position(s) and Qualifications**

Nicholas P. Constantakis, CPA

Birth Date: September 3, 1939
TRUSTEE

Began serving: June 2006

Principal Occupation: Director or Trustee of the Federated Fund Family.

Other Directorship Held: Director and Chairman of the Audit Committee, Michael Baker Corporation (architecture, engineering and construction services).

Previous Position: Partner, Andersen Worldwide SC.

Qualifications: Public accounting and director experience.

John F. Cunningham

Birth Date: March 5, 1943
TRUSTEE

Began serving: June 2006

Principal Occupation: Director or Trustee of the Federated Fund Family.

Other Directorships Held: Chairman, President and Chief Executive Officer, Cunningham & Co., Inc. (strategic business consulting); Trustee Associate, Boston College.

Previous Positions: Director, Redgate Communications and EMC Corporation (computer storage systems); Chairman of the Board and Chief Executive Officer, Computer Consoles, Inc.; President and Chief Operating Officer, Wang Laboratories; Director, First National Bank of Boston; Director, Apollo Computer, Inc.

Qualifications: Business management and director experience.

Maureen Lally-Green

Birth Date: July 5, 1949
TRUSTEE

Began serving: August 2009

Principal Occupations: Director or Trustee of the Federated Fund Family; Director, Office of Church Relations, Diocese of Pittsburgh; Adjunct Professor of Law, Duquesne University School of Law.

Other Directorships Held: Director, Auberle; Trustee, St. Francis University; Director, Ireland Institute of Pittsburgh; Director, UPMC Mercy Hospital; Regent, St. Vincent Seminary; Director, Epilepsy Foundation of Western and Central Pennsylvania; Director, Saint Thomas More Society, Allegheny County; Director, Carlow University.

Previous Position: Pennsylvania Superior Court Judge.

Qualifications: Legal and director experience.

Peter E. Madden

Birth Date: March 16, 1942
TRUSTEE

Began serving: June 2006

Principal Occupation: Director or Trustee, and Chairman of the Board of Directors or Trustees, of the Federated Fund Family.

Previous Positions: Representative, Commonwealth of Massachusetts General Court; President, Chief Operating Officer and Director, State Street Bank and Trust Company and State Street Corporation (retired); Director, VISA USA and VISA International; Chairman and Director, Massachusetts Bankers Association; Director, Depository Trust Corporation; Director, The Boston Stock Exchange.

Qualifications: Business management, mutual fund services and director experience.

Name	Birth Date	Positions Held with Trust Date Service Began	Principal Occupation(s) for Past Five Years, Other Directorships Held, Previous Position(s) and Qualifications
Charles F. Mansfield, Jr.	Birth Date: April 10, 1945	TRUSTEE	<p>Principal Occupations: Director or Trustee and Chairman of the Audit Committee of the Federated Fund Family; Management Consultant.</p>
Began serving: June 2006			<p>Previous Positions: Chief Executive Officer, PBTC International Bank; Partner, Arthur Young & Company (now Ernst & Young LLP); Chief Financial Officer of Retail Banking Sector, Chase Manhattan Bank; Senior Vice President, HSBC Bank USA (formerly, Marine Midland Bank); Vice President, Citibank; Assistant Professor of Banking and Finance, Frank G. Zarb School of Business, Hofstra University; Executive Vice President, DVC Group, Inc. (marketing, communications and technology).</p>
			<p>Qualifications: Banking, business management, education and director experience.</p>
R. James Nicholson	Birth Date: February 4, 1938	TRUSTEE	<p>Principal Occupations: Director or Trustee of the Federated Fund Family; Senior Counsel, Brownstein Hyatt Farber Schrek, P.C.; Former Secretary of the U.S. Dept. of Veterans Affairs; Former U.S. Ambassador to the Holy See; Former Chairman of the Republican National Committee.</p>
Began serving: January 2008			<p>Other Directorships Held: Director, Horatio Alger Association; Director, The Daniels Fund.</p>
			<p>Previous Positions: Colonel, U.S. Army Reserve; Partner, Calkins, Kramer, Grimshaw and Haring, P.C.; General Counsel, Colorado Association of Housing and Building; Chairman and CEO, Nicholson Enterprises, Inc. (real estate holding company); Chairman and CEO, Renaissance Homes of Colorado.</p>
			<p>Qualifications: Legal, government, business management and director experience.</p>
Thomas M. O'Neill	Birth Date: June 14, 1951	TRUSTEE	<p>Principal Occupations: Director or Trustee of the Federated Fund Family; Sole Proprietor, Navigator Management Company (investment and strategic consulting).</p>
Began serving: October 2006			<p>Other Directorships Held: Board of Overseers, Children's Hospital of Boston; Visiting Committee on Athletics, Harvard College.</p>
			<p>Previous Positions: Chief Executive Officer and President, Managing Director and Chief Investment Officer, Fleet Investment Advisors; President and Chief Executive Officer, Aeltus Investment Management, Inc.; General Partner, Hellman, Jordan Management Co., Boston, MA; Chief Investment Officer, The Putnam Companies, Boston, MA; Credit Analyst and Lending Officer, Fleet Bank; Director and Consultant, EZE Castle Software (investment order management software); Director, Midway Pacific (lumber).</p>
			<p>Qualifications: Business management, mutual fund, director and investment experience.</p>

Name	Principal Occupation(s) for Past Five Years, Other Directorships Held, Previous Position(s) and Qualifications
Birth Date Positions Held with Trust Date Service Began John S. Walsh Birth Date: November 28, 1957 TRUSTEE Began serving: June 2006	Principal Occupations: Director or Trustee of the Federated Fund Family; President and Director, Heat Wagon, Inc. (manufacturer of construction temporary heaters); President and Director, Manufacturers Products, Inc. (distributor of portable construction heaters); President, Portable Heater Parts, a division of Manufacturers Products, Inc. Previous Position: Vice President, Walsh & Kelly, Inc. Qualifications: Business management and director experience.
James F. Will Birth Date: October 12, 1938 TRUSTEE Began serving: June 2006	Principal Occupations: Director or Trustee of the Federated Fund Family; formerly, Vice Chancellor and President, Saint Vincent College. Other Directorships Held: Trustee, Saint Vincent College; Director, Allegheny Corporation; Trustee, Wheeling Jesuit University; Director, Liberty Tire Recycling. Previous Positions: Chairman, President and Chief Executive Officer, Armco, Inc.; President and Chief Executive Officer, Cyclops Industries; President and Chief Operating Officer, Kaiser Steel Corporation. Qualifications: Business management, education and director experience.

OFFICERS

Name	Principal Occupation(s) for Past Five Years and Previous Position(s)
Birth Date Positions Held with Trust Date Service Began John W. McGonigle Birth Date: October 26, 1938 SECRETARY Began serving: May 2006	Principal Occupations: Executive Vice President and Secretary of the Federated Fund Family; Vice Chairman, Executive Vice President, Secretary and Director, Federated Investors, Inc. Previous Positions: Trustee, Federated Investment Management Company and Federated Investment Counseling; Director, Federated Global Investment Management Corp., Federated Services Company and Federated Securities Corp.
Richard A. Novak Birth Date: December 25, 1963 TREASURER Began serving: May 2006	Principal Occupations: Principal Financial Officer and Treasurer of the Federated Fund Family; Senior Vice President, Federated Administrative Services; Financial and Operations Principal for Federated Securities Corp., Edgewood Services, Inc. and Southpointe Distribution Services, Inc. Previous Positions: Controller of Federated Investors, Inc.; Vice President, Finance of Federated Services Company; held various financial management positions within The Mercy Hospital of Pittsburgh; Auditor, Arthur Andersen & Co.
Brian P. Bouda Birth Date: February 28, 1947 CHIEF COMPLIANCE OFFICER AND SENIOR VICE PRESIDENT Began serving: June 2006	Principal Occupations: Senior Vice President and Chief Compliance Officer of the Federated Fund Family; Vice President and Chief Compliance Officer of Federated Investors, Inc. and Chief Compliance Officer of its subsidiaries. Mr. Bouda joined Federated in 1999 and is a member of the American Bar Association and the State Bar Association of Wisconsin.

Evaluation and Approval of Advisory Contract – May 2011

FEDERATED MDT LARGE CAP GROWTH FUND (THE “FUND”)

The Fund’s Board reviewed the Fund’s investment advisory contract at meetings held in May 2011. The Board’s decision regarding the contract reflects the exercise of its business judgment on whether to continue the existing arrangements.

In this connection, the Federated Funds’ Board had previously appointed a Senior Officer, whose duties include specified responsibilities relating to the process by which advisory fees are to be charged to a Federated fund. The Senior Officer has the authority to retain consultants, experts, or staff as may be reasonably necessary to assist in the performance of his duties, reports directly to the Board, and may be terminated only with the approval of a majority of the independent members of the Board. The Senior Officer prepared and furnished to the Board an independent, written evaluation that covered topics discussed below (the “Evaluation”). The Board considered that Evaluation, along with other information, in deciding to approve the advisory contract.

During its review of the contract, the Board considered compensation and benefits received by the Adviser. This included the fees received for services provided to the Fund by other entities in the Federated organization and research services (if any) received by the Adviser from brokers that execute Federated fund trades, as well as advisory fees. The Board is also familiar with and considered judicial decisions concerning allegedly excessive investment advisory fees, which have indicated that the following factors may be relevant to an Adviser’s fiduciary duty with respect to its receipt of compensation from a fund: the nature and quality of the services provided by the Adviser, including the performance of the fund; the Adviser’s cost of providing the services; the extent to which the Adviser may realize “economies of scale” as a fund grows larger; any indirect benefits that may accrue to the Adviser and its affiliates as a result of the Adviser’s relationship with a fund; performance and expenses of comparable funds; and the extent to which the independent Board members are fully informed about all facts the Board deems relevant bearing on the Adviser’s services and fees. The Board further considered management fees (including any components thereof) charged to institutional and other clients of the Adviser for what might be viewed as like services, and the cost to the Adviser and its affiliates of supplying services pursuant to the management fee agreements, excluding any intra-corporate profit and profit margins of the Adviser and its affiliates for supplying such services. The Board was aware of these factors and was guided by them in its review of the Fund’s advisory contract to the extent it considered them to be appropriate and relevant, as discussed further below.

The Board considered and weighed these circumstances in light of its substantial accumulated experience in governing the Fund and working with Federated on matters relating to the Federated funds, and was assisted in its deliberations by independent legal counsel. Throughout the year, the Board has requested and received substantial and detailed information about the Fund and the Federated organization that was in addition to the extensive materials that comprise and accompany the Senior Officer's Evaluation. Federated provided much of this information at each regular meeting of the Board, and furnished additional information in connection with the particular meeting at which the Board's formal review of the advisory contract occurred. Between regularly scheduled meetings, the Board also received information on particular matters as the need arose. Thus, the Board's consideration of the advisory contract included review of the Senior Officer's Evaluation, accompanying data and additional information covering such matters as: the Adviser's investment philosophy, revenue, profitability, personnel and processes; investment and operating strategies; the Fund's short- and long-term performance (in absolute terms, both on a gross basis and net of expenses, as well as in relationship to its particular investment program and certain competitor or "peer group" funds and/or other benchmarks, as appropriate), and comments on the reasons for performance; the Fund's investment objectives; the Fund's expenses (including the advisory fee itself and the overall expense structure of the Fund, both in absolute terms and relative to similar and/or competing funds, with due regard for contractual or voluntary expense limitations); the use and allocation of brokerage commissions derived from trading the Fund's portfolio securities (if any); and the nature, quality and extent of the advisory and other services provided to the Fund by the Adviser and its affiliates. The Board also considered the preferences and expectations of Fund shareholders and their relative sophistication; the continuing state of competition in the mutual fund industry and market practices; the range of comparable fees for similar funds in the mutual fund industry; the Fund's relationship to the Federated family of funds which include a comprehensive array of funds with different investment objectives, policies and strategies which are available for exchange without the incurrence of additional sales charges; compliance and audit reports concerning the Federated funds and the Federated companies that service them (including communications from regulatory agencies), as well as Federated's responses to any issues raised therein; and relevant developments in the mutual fund industry and how the Federated funds and/or Federated are responding to them. The Board's evaluation process is evolutionary. The criteria considered and the emphasis placed on relevant criteria change in recognition of changing circumstances in the mutual fund marketplace.

With respect to the Fund's performance and expenses in particular, the Board has found the use of comparisons to other mutual funds with comparable investment programs to be relevant, given the high degree of competition in the mutual fund business. The Board focused on comparisons with other similar

mutual funds more heavily than non-mutual fund products or services because it is believed that they are more relevant. For example, other mutual funds are the products most like the Fund, they are readily available to Fund shareholders as alternative investment vehicles, and they are the type of investment vehicle in fact chosen and maintained by the Fund's investors. The range of their fees and expenses therefore appears to be a generally reliable indication of what consumers have found to be reasonable in the precise marketplace in which the Fund competes. The Fund's ability to deliver competitive performance when compared to its peer group was a useful indicator of how the Adviser is executing the Fund's investment program, which in turn assisted the Board in reaching a conclusion that the nature, extent, and quality of the Adviser's investment management services were such as to warrant continuation of the advisory contract. In this regard, the Senior Officer has reviewed Federated's fees for providing advisory services to products outside the Federated family of funds (e.g., institutional and separate accounts). He concluded that mutual funds and institutional accounts are inherently different products. Those differences include, but are not limited to, different types of targeted investors; being subject to different laws and regulations; different legal structures; different average account sizes; different associated costs; different portfolio management techniques made necessary by different cash flows; and portfolio manager time spent in review of securities pricing. The Senior Officer did not consider these fee schedules to be determinative in judging the appropriateness of mutual fund advisory contracts.

The Senior Officer reviewed information compiled by Federated, using data supplied by independent fund ranking organizations, regarding the performance of, and fees charged by, other mutual funds, noting his view that comparisons to fund peer groups are relevant in judging the reasonableness of proposed fees. He also observed that certain funds may exhibit important differences in their objectives and management techniques when compared to other funds placed in the same peer group by ranking organizations, noting in this connection that the Fund's quantitative investment program is of such a type.

The Fund's performance fell below the median of the relevant peer group for the one-year, three-year and five-year periods covered by the Evaluation. In addition, the Board was informed by the Adviser that, for the same periods, the Fund underperformed its benchmark index for the one-year period, underperformed its benchmark index for the three-year period and underperformed its benchmark index for the five-year period. The Board discussed the Fund's performance with the Adviser and recognized the efforts being undertaken by the Adviser. The Board will continue to monitor these efforts and the performance of the Fund.

The Board also received financial information about Federated, including information regarding the compensation and benefits Federated derived from its relationships with the Federated funds. This information covered not only the fees under the advisory contracts, but also fees received by Federated's

subsidiaries for providing other services to the Federated funds under separate contracts (e.g., for serving as the Federated funds' administrator). The information also detailed any indirect benefit Federated may derive from its receipt of research services from brokers who execute Federated fund trades. In addition, the Board considered the fact that, in order for a fund to be competitive in the marketplace, Federated and its affiliates frequently waived fees and/or reimbursed expenses and have disclosed to fund investors and/or indicated to the Board their intention to do so in the future, where appropriate. Moreover, the Board receives regular reporting as to the institution or elimination of these voluntary waivers.

Federated furnished information, requested by the Senior Officer, that reported revenues on a fund-by-fund basis and made estimates of the allocation of expenses on a fund-by-fund basis, using allocation methodologies specified by the Senior Officer. The Senior Officer noted that, although they may apply consistent allocation processes, the inherent difficulties in allocating costs (and the unavoidable arbitrary aspects of that exercise) and the lack of consensus on how to allocate those costs may render such allocation information unreliable. The allocation information was considered in the analysis by the Board but was determined to be of limited use.

The Board and the Senior Officer also reviewed information compiled by Federated comparing profitability information for Federated to other publicly held fund management companies. In this regard, the Senior Officer noted the limited availability of such information, but nonetheless concluded that Federated's profit margins did not appear to be excessive and the Board agreed.

The Senior Officer's Evaluation also discussed the notion of possible realization of "economies of scale" as a fund grows larger. The Board considered in this regard that the Adviser has made significant and long-term investments in areas that support all of the Federated funds, such as personnel and processes for the portfolio management, compliance, internal audit, and risk management functions; and systems technology; and that the benefits of these efforts (as well as any economies, should they exist) were likely to be enjoyed by the fund complex as a whole. Finally, the Board also noted the absence of any applicable regulatory or industry guidelines on this subject, which (as discussed in the Senior Officer's Evaluation) is compounded by the lack of any common industry practice or general pattern with respect to structuring fund advisory fees with "breakpoints" that serve to reduce the fee as the fund attains a certain size. The Senior Officer did not recommend institution of breakpoints in pricing Federated's fund advisory services at this time.

It was noted in the materials for the Board meeting that for the period covered by the Evaluation, the Fund's investment advisory fee, after waivers and expense reimbursements, if any, was below the median of the relevant peer group. The Board reviewed the fees and other expenses of the Fund with the Adviser and was satisfied that the overall expense structure of the Fund remained competitive.

The Senior Officer noted that, considering the totality of the circumstances, and all of the factors referenced within his Evaluation, he had concluded that, subject to comments and recommendations made within his Evaluation, his observations and the information accompanying the Evaluation supported a finding by the Board that the management fees for each of the funds are reasonable and that Federated appeared to provide appropriate administrative services to the Fund for the fees paid. Under these circumstances, no changes were recommended to, and no objection was raised to, the continuation of the Fund's advisory contract. The Board concluded that the nature, quality and scope of services provided the Fund by the Adviser and its affiliates were satisfactory.

In its decision to continue an existing investment advisory contract, the Board was mindful of the potential disruptions of the Fund's operations and various risks, uncertainties and other effects that could occur as a result of a decision to terminate or not renew an advisory contract. In particular, the Board recognized that many shareholders have invested in the Fund on the strength of the Adviser's industry standing and reputation and with the expectation that the Adviser will have a continuing role in providing advisory services to the Fund. Thus, the Board's approval of the advisory contract reflected the fact that it is the shareholders who have effectively selected the Adviser by virtue of having invested in the Fund.

The Board based its decision to approve the advisory contract on the totality of the circumstances and relevant factors and with a view to past and future long-term considerations. Not all of the factors and considerations identified above were necessarily relevant to the Fund, nor did the Board consider any one of them to be determinative. With respect to the factors that were relevant, the Board's decision to approve the contract reflects its determination that Federated's performance and actions provided a satisfactory basis to support the decision to continue the existing arrangements.

Voting Proxies on Fund Portfolio Securities

A description of the policies and procedures that the Fund uses to determine how to vote proxies, if any, relating to securities held in the Fund's portfolio is available, without charge and upon request, by calling 1-800-341-7400. A report on "Form N-PX" of how the Fund voted any such proxies during the most recent 12-month period ended June 30 is available from Federated's website at FederatedInvestors.com. To access this information from the home page, select "View All" next to "Find Products." Select a fund name and share class, if applicable, to go to the Fund Overview page. On the Fund Overview page, select the "Documents" tab. At the bottom of that page, select "Proxy Voting Record Report (Form N-PX)." Form N-PX filings are also available at the SEC's website at www.sec.gov.

Quarterly Portfolio Schedule

The Fund files with the SEC a complete schedule of its portfolio holdings, as of the close of the first and third quarters of its fiscal year, on "Form N-Q." These filings are available on the SEC's website at www.sec.gov and may be reviewed and copied at the SEC's Public Reference Room in Washington, DC. (Call 1-800-SEC-0330 for information on the operation of the Public Reference Room.) You may also access this information from the "Products" section of Federated's website at FederatedInvestors.com. From the home page, select "View All" next to "Find Products." Select a fund name and share class, if applicable, to go to the Fund Overview page. On the Fund Overview page, select the "Documents" tab. At the bottom of that page, select "Form N-Q."

Notes

Mutual funds are not bank deposits or obligations, are not guaranteed by any bank and are not insured or guaranteed by the U.S. government, the Federal Deposit Insurance Corporation, the Federal Reserve Board or any other government agency. Investment in mutual funds involves investment risk, including the possible loss of principal.

This Report is authorized for distribution to prospective investors only when preceded or accompanied by the Fund's Prospectus, which contains facts concerning its objective and policies, management fees, expenses and other information.



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